# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/825,207 | 04/02/2001 | William K. Meade II | 10002844-1 | 2700 |

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| EXAMINER |
|---|
| PHAM, THIERRY L |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2625 | |

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/825,207 | MEADE ET AL. |
| | Examiner | Art Unit | |
| | Thierry L. Pham | 2625 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>21 March 2006</u>.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-6,8-14,16-18 and 38-47* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-14,16-18 and 38-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

• This action is responsive to the following communication: an Amendment filed on
3/21/06.

• Claims 1-6, 8-14, 16-18, and 38-47 are pending; claims 7, 15, and 19-37 have been
canceled; claims 43-47 are newly added.

### *Response to Arguments*

Applicant's arguments, see pages 9-10, filed 3/21/06, with respect to the rejection(s) of
claim(s) 1 under 102(a) have been fully considered and are persuasive. Therefore, the
rejection has been withdrawn. However, upon further consideration, a new ground(s) of
rejection is made in view of newly found prior art reference.

Applicant's arguments, see page 8-9, filed 3/21/06, with respect to claim 1 have been
fully considered and are persuasive. The 112, 1$^{st}$ paragraph rejection of claim 1 has been
withdrawn.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –                    ꞌ
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

Claims 16, 43-45, 47 is rejected under 35 U.S.C. 102(b) as being anticipated by Hirst et
al (US 5930553).

Regarding claim 16, Hirst discloses a printing device (printer 10, fig. 1),
comprising:

• a replaceable component (replaceable ink cartridge 18, fig. 1);

- component memory (memory 19, fig. 1) integrated into the replaceable component, the component memory including a software update (memory 19 stores software update, fig. 2 & 5, col. 3, lines 40-55) for the printing device, and

- software update information (fig. 5) stored in the component memory, the software update information including information to determine if the software update is available (fig. 5) for the printing device and for initiating loading of the software update from the component memory (loading from memory 19, fig. 5. col. 3, lines 40-55 and col. 5, lines 19-65).

Regarding claim 43, Hirst discloses a printing device (printer 10, fig. 1), comprising:

- a replaceable cartridge (ink cartridge 18, fig. 1);

- memory (memory 19, fig. 1) integrated with the replaceable cartridge, and

- a software update (software update 19e, fig. 2) stored on the memory.

Regarding claim 44, Hirst further discloses the printing device of claim 43 where the replaceable cartridge is a toner cartridge or an ink cartridge (ink cartridge 18, fig. 1).

Regarding claim 45, Hirst further discloses the printing device of claim 43 wherein the software update is for downloading (fig. 5) to the printing device.

Regarding claim 47, Hirst further discloses the printing device of claim 43 where the software update includes a printer driver (col. 2, lines 35-37) stored on the memory.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8-14, 17-18, 38-42, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al (US 5930553), and in view of Salgado et al (US 20020067504).

Regarding claim 1, Hirst discloses a method, comprising:

• retrieving software update information (fig. 5) from component memory (consumable memory 19 of ink cartridge 18, fig. 1-2) of a printing device replacement component;

• download (fig. 5, abstract, col. 3, lines 40-50) a software update identified by the software update information; and

• facilitating a download (fig. 5, abstract, col. 3, lines 40-50) of the software update utilizing the software update information from the component memory, wherein the facilitating comprises downloading the software update from the component memory (downloading from consumable memory 19 of ink cartridge, fig. 5).

Hirst explicitly teaches a method for detecting and downloading software update (i.e. new printer driver patches) from memory of an ink cartridge, but fails to explicitly teach and/or suggest a method of validating authority (i.e. requires user's approval) before downloading new update software.

Salgado, in the same field of endeavor for updating software, teaches a well known example of validating authority (set (level of user interaction in the upgrade process can be adjusted to fit the preferences of the user, for example, automatically downloading and installing new driver without user interface or requires user's approval prior for downloading and installing new updates, abstract, pars. 9-11 and pars. 25-27) before downloading new software update.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made by modifying print system of Hirst to include a method for validating authority before downloading any new software update because of a following reason: (●) validating authority before downloading any new software ensures that the right software update is being downloaded, by doing so, it helps reducing time and storage memory wasted for downloading software updates that are not compatible.

Therefore, it would have been obvious to combine Hirst with Salgado to obtain the invention as specified in claim 1.

Regarding claim 2, Saldago further teaches the method as recited in claim 1, wherein the validating further comprises producing a user prompt (fig. 4) requesting authorization to download the software update and validating that authority has been granted to download the software update and validating that authority (par. 25) has been granted to download the software update if the user response in affirmative to the user prompt.

Regarding claim 3, Salgado further teaches wherein the validating further comprises determining if a verification indicator is set in memory of the printing device and validating that authority has been granted to download the software update if the verification indicator is set (level of user interaction in the upgrade process can be adjusted to fit the preferences of the user, for example, automatically downloading and installing new driver without user interface or requires user's approval prior for downloading and installing new updates, abstract, pars. 9-11 and pars. 25-27).

Regarding claim 4, Salgado further teaches the method as recited in claim 1, wherein the validating further comprises determining if a verification indicator is set in memory of a host computer (par. 27) connected to the printing device and validating that authority has been granted to download the software update if the verification is set.

Regarding claim 5, Hirst and/or Salgado further teaches the method as recited in claim 1, wherein the validating further comprises accessing a remote site and determining if a verification indicator is set at the remote site (i.e. server, fig. 1 of Salgado) and validating that authority has been granted to download the software update if the verification indicator is set (e.g. a method for allowing only registered users to access the remote server to download software update is well known).

Regarding claim 6, Hirst further teaches the method as recited in claim 1, wherein the authority to download the software update is provided at the time the printing device is installed (fig. 4).

Regarding claim 8, Hirst further teaches the method as recited in claim 1, wherein the facilitating further comprises accessing a pointer in the software update information and accessing a site (figs. 4-6, col. 6, lines 10-25) reference by the pointer to locate and download the software update.

Regarding claim 9, Hirst further teaches the method as recited in claim 1, wherein the facilitating further comprises accessing a telephone number (fig. 5) of a remote access site in the software information and utilizing the telephone number (utilizing telephone number to contact vendor for update is well known in the art) to locate and download the software update.

Regarding claim 10, Hirst further discloses further the method as recited in claim 1, wherein the facilitating further comprises accessing a telephone number of a vendor site in the software information and facilitating display of the telephone number to a printing device user (fig. 5, utilizing telephone number to contact vendor for update is well known in the art), wherein the user can call the telephone number to order the software update.

Regarding claim 11, Hirst further discloses the method as recited in claim 1, wherein the facilitating further comprises accessing a universal resource locator (URL) in the software information and facilitating display of the URL to a printing device user, wherein the user can manually access the URL to order the software update (fig.5, col. 6, lines 13-20).

Regarding claim 12, Hirst further discloses the method as recited in claim 1, wherein the facilitating further comprises accessing a printable form (figs. 5-6, sending a

form to order software update is well known in the art) using the software information and causing the form to be printed on the printing device, wherein the user can complete the form and send it to a vendor to order the software update.

Regarding claim 13, Hirst discloses a printing device (printer 10, fig. 1), comprising:

- a replaceable component (removable ink cartridge 18, fig. 1);

- component memory (memory 19, fig. 1) integrated into the replaceable component; and

- software update information (software update information stored in memory 19, fig. 2) stored in the component memory, the software update information including information to determine if there is an update available for the printing device (fig. 5, abstract, col. 3, lines 40-50), the software update information further including the update available (fig. 5, abstract, col. 3, lines 40-50) to be loaded for the printing device.

Hirst explicitly teaches a method for detecting and downloading software update (i.e. new printer driver patches) from memory of an ink cartridge, but fails to explicitly teach and/or suggest initiating a software update authorization from the printing device user (i.e. requires user's approval) before downloading and installing new update software.

Salgado, in the same field of endeavor for updating software, teaches a well known example of initiating a software update authorization from the printing device user before downloading and installing new update software (set level of user interaction in the upgrade process can be adjusted to fit the preferences of the user, for example, automatically downloading and installing new driver without user interface or requires user's approval prior for downloading and installing new updates, abstract, pars. 9-11 and pars. 25-27) before downloading and installing new software update.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made by modifying print system of Hirst to include a method for initiating a software update authorization from the printing device user (i.e. requires user's approval) before downloading and installing new update software because of a following reason: (•) validating authority before downloading any new software ensures that the

right software update is being downloaded, by doing so, it helps reducing time and storage memory wasted for downloading software updates that are not compatible.

Therefore, it would have been obvious to combine Hirst with Salgado to obtain the invention as specified in claim 13

Regarding claim 14, Hirst further teaches the printing device as recited in claim 13, wherein the software update information for initiating a software update further comprises means to display a message to the user that indicates how the user can obtain the software update (prompt user, fig. 5).

Regarding claim 17, Hirst further teaches the printing device as recited in claim 13, wherein the printing device is a laser printer (laser printer, col. 4, lines 10-22) and the replaceable component is a toner cartridge (toner cartridge 18, col. 4, lines 45-67).

Regarding claim 18, Hirst further teaches the printing device as recited in claim 13, wherein the printing device is an ink jet printer (col. 4, lines 10-22) and the replaceable component is an ink cartridge (ink cartridge 18, col. 4, lines 45-67).

Regarding claim 38, Hirst further discloses the method as recited in claim 1, wherein the software update comprises a software update (i.e. printer driver, fig. 5, col. 2, lines 32-67) for software installed on the printer.

Regarding claim 39, Hirst further discloses the method as recited in claim 38, wherein the software update comprises an update for at least one firmware (fig. 5, col. 2, lines 32-67), an applet, color table and/or reference table for the printer.

Regarding claim 40, Hirst further discloses the method as recited in claim 39, wherein the firmware comprises at least one of processor-executable instructions (fig. 5, col. 2, lines 32-67) or an embedded web server.

Regarding claim 41, Hirst further discloses the method as recited in claim 1, wherein the software update comprises a software update for printer-related software (fig. 5, col. 2, lines 32-67) installed on a host computer.

Regarding claim 42, Hirst further discloses the method as recited in claim 41, wherein the software update comprises an update for at least one of a printer driver (fig. 5, col. 2, lines 32-67) a printer status utility and/or a printer administrative utility.

Regarding claim 46, Salgado further teaches the printing device where the software update is for downloading to a computer (fig. 4, it is well known for a printer driver to be stored either in printer or host device) capable of communicating with the printing device.
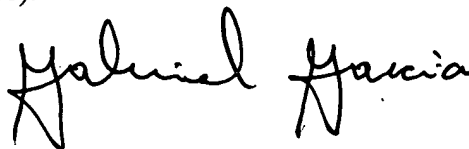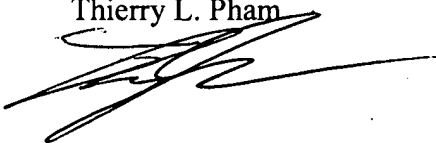
## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

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PRIMARY EXAMINER